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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,183

02/25/2004

Harold M. Zimmerman

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32993 7590 03/02/2007
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EXAMINER

SOOHOO, TONY GLEN

ART UNIT

PAPER NUMBER

1723

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/786,183

Applicant(s)

ZIMMERMAN, HAROLD M.

Examiner

Tony G. Soohoo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2-14-2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-10,12-14,16 and 33-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-10,12-14,16 and 33-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Pending claims are claims 1-3, 5-10, 12-14, 16, and 33-53.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 33-38, and 46-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwako et al 4691867 (Previously cited).

The Iwako et al 4691867 (Iwako '867) discloses a turbine mixer including a cylindrical housing mixing chamber housing 21, 15a, an inner chamber 1st upper chamber located above the disk plate 9 and a lower outer chamber located the rotating disk plate 9, a back plate 2 with an inlet opening at 25 and port 25 for receiving a dry feed of material and cover plate 15b with an discharge port 14. A liquid feed 23 provides a combination of the dry feed and the liquid at the opening just below the tube 10 and above the central opening 2 of the front cover plate. Additionally there are pegs and fins 12, 13, 7, 5 located above and below, and radial extending from the circumference of the disk. A gap is formed from the edge of the rotating disk 9 and the cylindrical section of the wall 15a. (It is noted that the claims do not point out that the fins are disposed outwards from the edge of the disc)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-7, 9-10, 12-14, 40-42, 44-45, and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwako et al 4691867 in view of Haws 4406548 and Bertogilo 4439042 (all previously cited).

The Iwako et al 4691867 reference discloses all of the recited subject matter as defined within the scope of the claims with the exception of a provision of a mobile frame in which the turbine mixer device is mounted, and having an auger to provide the supply of dry material into the back plate .

The reference to Haws discloses a mobile frame 14 which may hold a mixing device which has a supply for dry material and liquid which may be mixed together to form a slurry. The mobile frame provides a convenient manner to produce and dispense the slurry at a desired jobsite, see column 1, lines 5-35.

In view of the showing of the Haws reference that a mobile frame may be utilized to provide and support and supply components of dry and liquid components along with a provision of a mixer to blend the components into a slurry, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the device of Grun

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'305 with a mobile frame supporting the hopper, liquid supply and mixer so that the slurry produced by the Grun device may be more easily transported to a jobsite.

In regards to the issue of providing an auger to supply dry material to the turbine mixer, the reference to Bertogilo 4439042 teaches that supply of dry material in a hopper 1 may be provided with an auger disposed axial to the rotation axis of a centripetal turbine mixer 9 as liquid is simultaneously introduced via port 7 to provide an efficient supply of material into the turbine mixer 9, 10.

In view of the showing of the Bertogilo 4439042 reference of the manner to introduce dry material and liquid together into the inlet opening of a turbine mixer, it is deemed that it would have been obvious to one of ordinary skill in the art to provide and modify the port of the Iwako et al reference to a port including an auger and liquid inlet to more effectively feed material into the turbine mixer of the Iwako reference.

With regards to claim 52 the language is directed to the operation of the rotation speed of the plate and has been fully considered, however been afforded no patentable structural distinction to an apparatus claim of patent protection to the structure of the drive and mixing plate.

5. Claims 8, 16, 39, 43, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwako et al 4691867 in view of Haws 4406548 and Bertogilo 4439042 as applied to claims 1, 10, 35, 42, 52 above, and further in view of Hollingsworth 4822482 (previously cited).

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The Iwako et al 4691867 in view of Haws 4406548 and Bertogilo 4439042 combination of teachings, as discussed above, discloses all of the recited subject matter as defined within the scope of the claims with the exception of a slidably, adjustable opening at the discharge opening.

The reference to Hollingsworth is cited as showing that it known to utilized a sliding valve element 12 located at an opening which discharges slurry from the opening so as to control the amount of slurry which passes through in discharging from that opening.

In view of the teaching and showing by the Hollingsworth reference that one may utilize a sliding valve to control the rate of slurry discharge from an opening, column 7, line 63-65, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the discharge opening at 3 of the Grun device with a slidably, adjustable, discharge opening so as to better regulate the rate of discharge from the mixing chamber.

Response to Arguments

6. Applicant's arguments with respect to newly amended or presented pending claims 1-3, 5-10, 12-14, 16, and 33-53 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following disclose turbine mixers: Sherwood 4834542, Mayer

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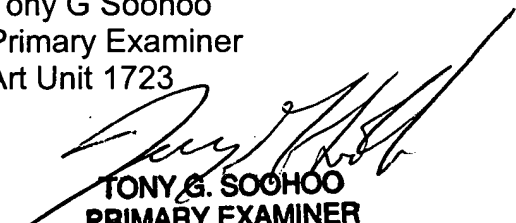
et al 4436430, Arribau et al 4239396, Iwako et al 4175873, Iwako 3998433, Mori et al 6435707, Hamada et al 6019498, Arribau et al 6974246, Hamada et al 5599102, Hedrich et al 4391529,

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 8AM-5PM, Tue-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tony G Soohoo
Primary Examiner
Art Unit 1723



TONY G. SOOHOO
PRIMARY EXAMINER